From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY CHAS. HUDE A/S Sagstyr 33, H.C. Andersens Boulevard 24566 WRITTEN OPINION 1780 Copenhagen V DANEMARK (PCT Rule 66) 1 3 APR. 2004 AS 400 TII F Date of maill 08.04.2004 (day/month/year) Applicant's or agent's file reference **REPLY DUE** within 3 month(s) from the above date of mailing Priority date (day/month/year) International filing date (day/month/year) International application No. 02.07.2002 02.07.2003 PCT/DK 03/00462 International Patent Classification (IPC) or both national classification and IPC A23K1/16, A23K1/16 Applicant HANSEN, John Erik This written opinion is the first drawn up by this International Preliminary Examining Authority. This opinion contains indications relating to the following items: 2 \boxtimes Basis of the opinion Priority 11 Non-establishment of opinion with regard to novelty, inventive step and industrial applicability 111 IV Lack of unity of invention Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; X citations and explanations supporting such statement Certain documents cited Certain defects in the international application VII VIII 🗆 Certain observations on the international application The applicant is hereby invited to reply to this opinion See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d) When? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66 3 How? For the form and the language of the amendments, see Rules 66 8 and 66 9. For an additional opportunity to submit amendments, see Rule 66.4. Also: For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66 6 If no reply is filed, the international preliminary examination report will be established on the basis of this opinion. The final date by which the international preliminary examination report must be established according to Rule 69.2 is:

Name and mailing address of the international preliminary examining authority:

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European Patent Office - P B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 **Authorized Officer**

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WRITTEN OPINION

١. ٠	Basis	of the	opin	ion
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1.	With regard to the ele	ments of the interr	national application (Rep	placement sheets which have be	een furnished to
	the receiving Office in	response to an inv	itation under Article 14 o	are referred to in this opinion as	s "originally
	filed"):	•	•	•	

					•		
	Dos	cription, Pages					
		cription, rages	as erisinally filed				
	1-9	•	as originally filed	·			
	Clai	ims, Numbers	,				
	1-5		as originally filed		• •		
2	With	ith regard to the language , all the elements marked above were available or furnished to this Authority in the nguage in which the international application was filed, unless otherwise indicated under this item.					
	The	se elements were available	or furnished to this	Authority in the following language:	, which is:		
	0	the language of publication	of the international	purposes of the international search (application (under Rule 48.3(b)). purposes of international preliminary	•		
3	With inte	With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:					
		contained in the internation	al application in wri	tten form.			
		filed together with the international application in computer readable form.					
		furnished subsequently to this Authority in written form.					
		furnished subsequently to this Authority in computer readable form.					
	Ü	The statement that the sub in the international application	sequently furnished ion as filed has bee	I written sequence listing does not go en furnished.	beyond the disclosure		
		The statement that the infolisting has been furnished.		computer readable form is identical	to the written sequence		
1.	The	amendments have resulted	in the cancellation	of:			
		the description, pages	:				
		the claims, Nos.:					
		the drawings, sheets	s:				
5.		This opinion has been esta been considered to go beyo	blished as if (some and the disclosure	of) the amendments had not been mas filed (Rule 70.2(c)).	ade, since they have		
3.	Add	litional observations, if nece	ssary:				
1.	. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
١.	Statement						

Form PCT/PEA/408 (January 2004)

WRITTEN OPINION

International application No.

PCT/DK 03/00462

Novelty (N)

Claims

Inventive step (IS)

Claims

Industrial applicability (IA)

Claims

1-5

2. Citations and explanations see separate sheet

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: US-A-6 156 333 (LANGREHR JANA S) 5 December 2000 (2000-12-05)

D2: US-A-5 976 568 (RILEY PATRICIA A) 2 November 1999 (1999-11-02)

2. The present application does not meet the requirements of Article 33 (3) PCT because the subject-matter of independent claim 1 does not involve an inventive step.

The document D1 describes feed compositions for improving the immune status of animals which may contain biotin (2.5-10%), allicin (<2%) and vitamin E, vitamin C and selenium (see D1; column 3, line 7-67, column 11, paragraph 3).

The document D2 discloses a system containing biotin, garlic, vitamin C, vitamin E, and selenium (see D2; claim 3).

The subject-matter of independent claim 1 consists in the specification of a kit containing a selection of a composition from the range of values described in the documents D1-D2. Such a selection can only be regarded as inventive, if the chosen composition presents unexpected effects or properties in relation to the rest of the range. However, no such effects or properties are indicated in the application. Hence no inventive step is present in the subject-matter of claim 1.

3. Dependent claims 2-5 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, as the features of these dependent claims have already been employed for the same purpose in similar compositions and processes (see whole document D1; D2).



Patents Trade Marks Designs

The European Patent Office PCT Department Erhardtstrasse 27 D-80331 Munich

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European Palent Attorney European Trade Mark Attorney

7 July 2004

Dear Sirs

International patent application No PCT/DK2003/00462

Applicant: John Erik Hansen

International classification: IPC A23K1/16

My ref: 77874 BC/ge

In reply to the first Written Opinion dated 8 April 2004 I shall hereby on behalf of the Applicant make the following remarks.

The Examiner has cited two publications, ie. D1: US-A-6,156,133 (Langrehr) and D2: US-A-5,976,568 (Riley), and states that the present application does not meet the requirements of Article 33(3) PCT because the subject-matter of claim 1 does not involve an inventive step. D1 discloses feed compositions for improving the immune status of animals, said compositions containing biotin (2.5-10 %), allicin (<2 %) and vitamin E, vitamin C and selenium. D2 discloses a system containing biotin, garlic, vitamin C, vitamin E and selenium.

The Examiner correctly states that the subject-matter of claim 1 of the present application relates to a kit containing a selection of a composition from the range of values described in D1 and D2 However, The Examiner does not mention that the product according to D1 is a specific feed fortifier and enhancer for preruminant, bovine calves comprising animal plasma as well as other ingredients, including biotin, allicin, vitamins and selenium. The product accord-

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ing to D2 is a modular system of dietary supplement compositions for use on human beings.

Thus, it can be ascertained that neither D1 nor D2 are aimed at the conditions and the target group of animals at which the present application is aimed.

It can also be ascertained that the vitamin-containing system of the present application demonstrates significant advantages when administered to certain groups of animals in accordance with an administration plan set out in the application.

These advantages can be illustrated by means of the following examples:

1. Mink

A public inquiry among mink farmers in Denmark indicates that 40 % of the respondents find the condition of the animals unchanged, whereas 60 % record an improvement in the condition of the animals, particularly in relation to the so-called Greasy Kits Syndrome. This condition causes unthriftiness, reduced weight gain and a mortality rate of up to 50 %. The cause of the syndrome is not yet known, but it is supposed to be affected by the development of the digestive tract.

The general mortality among minks (both adult animals and young ones) is indicated as being declining when kit 2 is used in combination with a feed additive in the form of natural antioxidants (blueberries, allicin and roots).

Milch cows

40-50 % of milch cows worldwide become infected with the disease digital dermatitis (corresponding to about 180 million animals) causing a decline in the milk production of up to 40 %. In a Danish herd of more than 4,000 cows, the situation has stabilized, ie. no new incidents are found, and more than half the herd has been cured after treatment with kit 1 followed by treatment with kit 2.

Broilers

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Chas.Hude

On the biggest chicken farm in Denmark having an annual production of approx. 12 million

chickens, a considerable improvement of the immune response of the animals within this animal

group has been recorded after treatment with kit 2 according to the invention. An effect was re-

corded within 12 days in the form of a considerable weight gain of 20 g per chicken. The

weight gain was approx. 100 g per chicken on the time of slaughtering (after 43 days), thus

yielding increased profit of approx. 10 % for the farmer as well as improved quality of life for

the animals.

Another aspect is that the useful parts of the vitamin-containing system according to the inven-

tion are accumulated in the liver of the chicken, from where they can be extracted and used

again.

Pigs

Several positive responses have been received from large-scale pig breeders reporting that

treatment with kit 2 and a natural feed additive is effective against diarrhoea and a too high in-

tensity of infection. In this way, it becomes possible to reduce the use of medicine considerably

and increase the quality of life for the animals - and thus ensure the ultimate product quality.

On the basis of the above, it is the opinion of the Applicant that it has been substantiated that

the vitamin-containing system according to the invention leads to unexpected positive effects

which could not have been anticipated on the basis of the prior art, including the cited docu-

ments D1 and D2.

I hope that the Examiner agrees with this view and look forward to receiving a positive Prelimi-

nary Examination Report.

Yours faithfully

Bent Christensen

Representative of the applicant

Enc: Form 1038